

What Is Claimed Is:

1 1. A method for protecting an item of private information in a
2 database, wherein the item of private information is used as a key for retrieving
3 data from the database, wherein the method comprises:

4 receiving the item of private information;
5 creating a hash of the item of private information; and
6 storing the hash of the item of private information in a database.

1 2. The method of claim 1, wherein creating the hash can include
2 creating a SHA-1 or MD5 hash.

1 3. The method of claim 1, wherein the hash of the item of private
2 information is created by the database in a manner that is transparent to an
3 application which manipulates the private information.

1 4. The method of claim 1, wherein processing a query containing the
2 private information involves:

3 receiving the item of private information;
4 creating a hash of the item of private information; and
5 querying the database using the hash of the item of private information.

1 5. The method of claim 1, wherein the item of private information
2 can include one of:

3 a social security number;
4 a driver's license number;
5 a passport number;

6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 6. The method of claim 1, wherein multiple items of private
2 information can be combined prior to creating the hash.

1 7. The method of claim 1, wherein creating the hash further
2 comprises checking a column attribute in the database to see if "privacy" is
3 enabled, and if so creating the hash.

1 8. The method of claim 1, wherein the database is a Lightweight
2 Directory Access Protocol (LDAP) database.

1 9. A computer-readable storage medium storing instructions that
2 when executed by a computer cause the computer to perform a method for
3 protecting an item of private information in a database, wherein the item of
4 private information is used as a key for retrieving data from the database, wherein
5 the method comprises:
6 receiving the item of private information;
7 creating a hash of the item of private information; and
8 storing the hash of the item of private information in a database.

1 10. The computer-readable storage medium of claim 9, wherein
2 creating the hash can include creating a SHA-1 or MD5 hash

1 11. The computer-readable storage medium of claim 9, wherein the
2 hash of the item of private information is created by the database in a manner that
3 is transparent to an application which manipulates the private information.

1 12. The computer-readable storage medium of claim 9, wherein
2 processing a query containing the private information involves:
3 receiving the item of private information;
4 creating a hash of the item of private information; and
5 querying the database using the hash of the item of private information.

1 13. The computer-readable storage medium of claim 9, wherein the
2 item of private information can include one of:
3 a social security number;
4 a driver's license number;
5 a passport number;
6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 14. The computer-readable storage medium of claim 9, wherein
2 multiple items of private information can be combined prior to creating the hash.

1 15. The computer-readable storage medium of claim 9, wherein
2 creating the hash further comprises checking a column attribute in the database to
3 see if "privacy" is enabled, and if so creating the hash.

1 16. The computer-readable storage medium of claim 9, wherein the
2 database is a Lightweight Directory Access Protocol (LDAP) database.

1 17. An apparatus for protecting an item of private information in a
2 database, wherein the item of private information is used as a key for retrieving
3 data from the database, comprising:

4 a receiving mechanism configured to receive the item of private
5 information;

6 a hashing mechanism configured to create a hash of the item of private
7 information; and

8 a storage mechanism configured to store the hash of the item of private
9 information in a database.

1 18. The apparatus of claim 17, wherein the hashing mechanism is
2 configured to use SHA-1 or MD5 hashing functions.

1 19. The apparatus of claim 17, wherein the hashing mechanism is
2 internal to the database and is transparent to an application which manipulates the
3 private information.

1 20. The apparatus of claim 17, further comprising a query mechanism
2 configured to perform queries containing the private information, wherein the
3 query mechanism is configured to:

4 receive the item of private information;

5 create a hash of the item of private information; and to

6 query the database using the hash of the item of private information.

1 21. The apparatus of claim 17, wherein the item of private information
2 can include one of:

3 a social security number;
4 a driver's license number;
5 a passport number;
6 an email address;
7 a person's name; and
8 a person's mother's maiden name.

1 22. The apparatus of claim 17, wherein the hashing mechanism can be
2 further configured to combine multiple items of private information prior to
3 creating the hash.

1 23. The apparatus of claim 17, wherein the hashing mechanism is
2 further configured to check a column attribute in the database to see if "privacy" is
3 enabled, and if so, to create the hash of the private information.

1 24. The apparatus of claim 17, wherein the database is a Lightweight
2 Directory Access Protocol (LDAP) database.